



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/289,601	04/12/1999	SHINJI KONISHI	Q53957	8834

7590 08/27/2004

SUGHRUE MION ZINN MACPEAK & SEAS PLLC
2100 PENNSYLVANIA AVENUE N W
WASHINGTON, DC 200373202

EXAMINER

TRAN, DOUGLAS Q

ART UNIT	PAPER NUMBER
----------	--------------

2624

DATE MAILED: 08/27/2004

29

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/289,601

Applicant(s)

KONISHI, SHINJI

Examiner

Douglas Q. Tran

Art Unit

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 10 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 6/10/04 for fig. 11 and 21(a,b) is/are: a) ☒ accepted or b) ☐ objected to by the Examiner
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 26.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-31 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

For at least claims 1, 11, 20, 23, 24 the specification and figures do not support the limitation is described in these claims: "return a part of print job data" from the printer. From page 16, lines 7-20 of the Specification of the Application just merely describes that the printer receives the reply information and returns "or responses" the job processing information. Thus, the printer would not return a part of the print job data; the printer just merely response the status of the print job based on the requested information located in a part of the received print job data.

Therefore, for prior art proposes, the claims are interpreted in accordance with the specification as indicated above.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Fujita et al. (US Patent No. 6,055,361) and Kawakami (US Patent No. 6,433,884 B1).

As to claim 20, McCormick teaches a recording medium recording a program (col. 8, lines 60-67) for generating print data to be transmitted to a printer, the recording medium recording:

a print data generation function (i.e., windows print manager) of generating print data and means (i.e., control printing 1601 in fig. 16);

a reply information issuance function (i.e., the queue processor) of issuing reply information (i.e., status requests) at a predetermined position of print job data containing the print data (col. 8, lines 26-33 describes that the communications driver receives the print job data including blocks of print data and status requests from the Queue Processor. Thus, the queue processor would be a reply information issuance function for issuing status requests within a predetermined position of the print job data);

a job processing state monitor function (i.e., the queue processor) of monitoring a processing state of the print job data based on a part of the print data returned from the printer in accordance with the reply information (col. 8, lines 33-36 indicates that the Queue Processor

Art Unit: 2624

receives status information from the communication driver based on status requests issued by the queue processor "col. 8, lines 30-33" and col. 8, lines 50-53 indicates that the status information from the printer in a format that can be read and understood by a computer).

Although Fujita teaches print data job containing the print data and the reply information (or the requested status), Fujita does not teach the reply information includes intrinsically a predetermined destination in which the reply information for replying the process state to the predetermined destination.

Kawakami teaches print data job containing the predetermined destination, which is included in intrinsic data of the reply information (col. 4, lines 47-50, and fig. 4 shows the 4th row indicates reply information including information of the return command and status to the predetermined destination which is showed on the 3rd row).

It would have been obvious to have modified the print job of McCormick to contain the print data and the predetermined destination that is included in intrinsic data of the reply information as taught Kawakami. The suggestion for modifying the system of McCormick can be reasoned by one of ordinary skill in the art as set forth by Kawakami because 1) both of the printing systems are related with the exchange of data between the host computer; 2) the modified system would be efficiency by providing the information of the destination in the reply information so that the printer can easily keep track and response the status of the printer to the sending device based on the device information in the status information.

As to claim 21, McCormick teaches the reply information issuance function issues timing specification for specifying return timing of the reply information in addition to the reply information (col. 10, lines 36-46).

Art Unit: 2624

As to claim 22, McCormick teaches reply information detection (1603 in fig. 16) function of detecting the reply information returned from the printer and sending the detected reply information to the job processing state monitor function (1601 in fig. 16).

5. Claims 1-19, 23-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Fujita et al. (US Patent No. 6,055,361) and Kawakami (US Patent No. 6,433,884 B1).

As to claim 11, Fujita teaches:

Reception means (41 in fig. 1) for receiving print job data contains print data and commands (col. 5, lines 61-63) and reply information (commands in the print job data includes urgent command 'col. 5, lines 56-58', the urgent command includes status inquiry command 'col. 6, lines 16-18' and more reference in col. 13, lines 59-67, col. 14, lines 47-55);

print job data processing means (i.e., command processor 23 in fig. 1) for interpreting the print job data (col. 5, lines 10-14), detecting the reply information (i.e., the status inquiry command) and returning a part of the print job data (page information of the print job data), which indicates a process state of the print job based on the reply information to a predetermined destination which is external to the printer (col. 6, lines 24-29 and col. 2, lines 55-67; the status of page information of the print job is informed to the host in steps of 1903 to 1905 in fig. 19);

print control means (24 in fig. 1) for printing based on interpretation of the print data processing means (col. 5, lines 16-18).

However, Fujita does not teach print data job containing the predetermined destination, which is included in intrinsic data of the reply information.

Art Unit: 2624

Kawakami teaches print data job containing the predetermined destination, which is included in intrinsic data of the reply information (col. 4, lines 47-50, and fig. 4 shows the 4th row indicates reply information including information of the return command and status to the predetermined destination which is showed on the 3rd row).

It would have been obvious to have modified the print job of Fujita to contain the predetermined destination that is included in intrinsic data of the reply information as taught Kawakami. The suggestion for modifying the system of Fujita can be reasoned by one of ordinary skill in the art as set forth by Kawakami because 1) both of the printing systems of Fujita and Kawakami are related with the exchange of data between the host computer; 2) the modified system would be efficiency by providing the information of the destination in the reply information so that the printer can easily keep track and response the status of the printer to the sending device based on the device information in the status information.

As to claim 12, Fujita teaches the print job data processing means returns the reply information to the predetermined destination after completion of processing of the print data (col. 5, line 64 through col. 6, line 5).

As to claim 13, Fujita teaches if the reply information is related to print data concerning print operation, the print job data processing means checks execution of the print data concerning print operation before returning the reply information to the predetermined destination (col. 5, line 64 through col. 6, line 5).

As to claim 14, Fujita teaches the print data concerning print operation is at least any one of a paper feed instruction, a paper eject instruction, a page feed instruction, a line feed instruction and a carriage return instruction (col. 5, lines 24-40).

Art Unit: 2624

As to claim 15, Fujita teaches the reply information issuance means issues timing specification information for specifying return timing of the reply information in addition to the reply information, and wherein the print job data processing means returns timing specified on the timing specification information (col. 1, lines 48-50).

As to claim 16, Fujita teaches the reply information issuance means issues timing specification information for specifying return timing of the reply information in addition to the reply information, and wherein upon reception of the timing specification information, the print data processing means returns the reply information to the predetermined destination after completion of processing the print data related to the reply information (col. 1, lines 48-50).

As to claims 17-18, Fujita teaches the command code including request for status information (in fig. 8, the order of command codes does not effect the result for requesting to the printer).

As to claims 19 and 31, Fujita teaches the reception means, the print data processing means, and the print control means can operate in parallel (see fig. 1).

As to claim 24, the combination of Fujita and Kawakami teaches program for instructing the apparatus claim 11 as indicated above.

As to claims 28-29, Kawakami teaches the printer system in utilized in a network environment includes a plurality of host computers that output information to the printer (fig. 4 shows the 3rd byte with unit ID in the network)

As to claim 1, Fujita teaches a host computer (10 in fig. 1) and a printer (20 in fig. 1) for receiving print data from the host computer and printing based on the print data;

print job data processing means (i.e., command processor 23 in fig. 1) for interpreting the print job data comprises the print data (i.e. image data) and reply information (i.e., commands col. 5, lines 5-18) (note: commands in the print job data includes urgent command 'col. 5, lines 56-58', the urgent command includes status inquiry command 'col. 6, lines 16-18' and more reference in col. 13, lines 59-67, col. 14, lines 47-55), detecting and returning a part of the print job data, which indicates a process state of the print job based on the reply information to a predetermined destination which is external to the printer (col. 2, lines 55-67; the status of page information of the print job is informed to the host in steps of 1903 to 1905 in fig. 19);

print control means (24 in fig. 1) for printing based on interpretation of the print data processing means (col. 5, lines 16-18); and

job processing state monitor means (25 in fig. 1), contained in the printer, for monitoring a processing state of the print job data based on the reply information returned from the print data processing means (col. 6, lines 3-5, 24-28).

the host computer (from 10 in fig. 1) for generating print data and for issuing reply information (i.e., request command or status inquiry command in fig. 8) at a predetermined position of print job data containing the print data (col. 5, lines 5-9 and 61-63).

However, Fujita does not teach print data job containing the predetermined destination, which is included in intrinsic data of the reply information.

Kawakami teaches print data job containing the predetermined destination, which is included in intrinsic data of the reply information (col. 4, lines 47-50, and fig. 4 shows the 4th row indicates reply information including information of the return command and status to the predetermined destination which is showed on the 3rd row).

It would have been obvious to have modified the print job of Fujita to contain the predetermined destination that is included in intrinsic data of the reply information as taught Kawakami. The suggestion for modifying the system of Fujita can be reasoned by one of ordinary skill in the art as set forth by Kawakami because 1) both of the printing systems of Fujita and Kawakami are related with the exchange of data between the host computer; 2) the modified system would be efficiency by providing the information of the destination in the reply information so that the printer can easily keep track and response the status of the printer to the sending device based on the device information in the status information.

As to claim 2, Fujita teaches the print job data processing means returns the reply information to the predetermined destination after completion of processing of the print data (col. 5, line 64 through col. 6, line 5).

As to claim 3, Fujita teaches if the reply information is related to print data concerning print operation, the print job data processing means checks execution of the print data concerning print operation before returning the reply information to the predetermined destination (col. 5, line 64 through col. 6, line 5).

As to claim 4, Fujita teaches the reply information issuance means issues timing specification information for specifying return timing of the reply information in addition to the reply information, and wherein the print job data processing means returns timing specified on the timing specification information (col. 1, lines 48-50).

As to claim 5, Fujita teaches the reply information issuance means issues timing specification information for specifying return timing of the reply information in addition to the reply information, and wherein upon reception of the timing specification information, the print

Art Unit: 2624

data processing means returns the reply information to the predetermined destination after completion of processing the print data related to the reply information (col. 1, lines 48-50).

As to claim 6, Fujita teaches the reply information issuance means issues timing specification information for specifying return timing of the reply information in addition to the reply information, and wherein upon reception of the timing specification information, the print data processing means returns the reply information to the predetermined destination after checking processing of the print data concerning print operation related to the reply information (col. 5, line 64 through col. 6, line 5).

As to claim 7, Fujita teaches the reply information issuance means issues the reply information and the timing specification information so that the print data is placed between the reply information and the timing specification information. (col. 5, line 64 through col. 6, line 5).

As to claim 8, Fujita teaches the reply information issuance means issues the timing specification information and the reply information so that the timing specification information, the print data, and the reply information are processed by the print data processing means in this order (col. 5, line 64 through col. 6, line 5).

As to claim 9, Fujita teaches the print data concerning print operation is at least any one of a paper feed instruction, a paper eject instruction, a page feed instruction, a line feed instruction, and a carriage return instruction (col. 5, 19-23; note: the printer command should include these above features).

As to claim 10, Fujita teaches reply information detection means for detecting the reply information returned from the print data processing means and sending the detected reply information to the job processing state monitor means (from 23 to 26 in fig. 1).

As to claim 23, due to the similarity of this claim to that of the feature of the combination of Fujita and Kawakami as in claim 1, this claim is rejected as the reasons applied to claim 1 except for a monitoring processor which is external to the printer, such limitation would have been obvious in the system of Fujita and Kawakami if the monitor processor is set up in a server which controls the print job between the host computer and the printer. Fujita teaches that a monitoring processor (23 in fig. 20) is associated with page monitor 60 (fig. 20) detects the status of each page and then notifies to the host via interface (21 in fig. 20). If a monitoring processor, which is external to the printer, receives the status information from the printer, the result is the same with the teaching of Fujita. Therefore, the monitoring processor being external to the printer in Fujita would have been a matter of obvious design choice to one of ordinary skill in the art.

As to claim 25, Fujita teaches the print data processing means automatically returns the reply information to the predetermined destination and the return of the reply information is not in response to any external command (the return of the reply information to the host based on the status inquiry command included in the print job, col. 6, lines 24-28).

As to claims 26-27, Kawakami teaches the printer system in utilized in a network environment includes a plurality of host computers that output information to the printer (fig. 4 shows the 3rd byte with unit ID in the network).

As to claim 30, Fujita teaches reply information detection function of detecting the reply information returned from the printer and sending the detected reply information to the job processing state monitor function (42 in fig. 1).

Response to Arguments and Amendment

Applicant's arguments filed 6/10/04 have been fully considered but they are not persuasive.

Applicant asserted in page 2 that: "For example, as disclosed in the non-limiting embodiment on pg. 4 of the present Application, reply information is previously embedded into a predetermined position of the print job data (also see pg. 12, lines 21-23). Applicant submits that once embedded, *the reply information becomes "a part of the print job data"*, along with the print data (pg. 14, lines 6-7)"; and

page 3, lines 3-8 that: " Further, the Application discloses that the print job data processing means returns the reply information to the predetermined position, so as to monitor the processing state of the print job data (non-limiting embodiment, pg. 3, line 21 to pg. 4, line 1; pg. 13, lines 23-25). Therefore, the claimed "part" of the print job data which is returned, is the part of the print job data containing the reply information, such that a process state of the print job data can be indicated based on the reply information, as recited in the claims".

In reply, from figure 2 (a), and with respect to lines 3-7 on page 14 of the specification, indicates the print job data packet is transmitted from the host computer to the printer. The print job data packet including the reply information RD and print data PD. Therefore, the reply information RD is a part, which is embedded in the print job data packet. Thus, the Examiner agrees "the reply information" would be the status request information that is a part of the print job data, which is transmitted from the host computer to the printer for requesting the status of the print job or the printer.

However, page 14, lines 19-21 of the specification describes that “the host computer 1 can keep track of the progress state of the print job by detecting the job processing state from the returned job processing information” which means *the status* of the job processing information is reported to the host for keep tracking. Thus, the original information from the reply information RD is not returned to the host, but *the status of the result* of the printing job processing is merely just reported to host computer based on the request information from the reply information RD.

Furthermore, the figures and the specification of the Application do not mention *the return packet* from the printer to the host computer including the reply information or a part of the print job data.

If the specification mentions that the return packet from the printer to the host computer including the reply information or a part of the print job data, then does the printer requests the host computer for processing the print job?; and

If a part of the reply information such as document name and the host computer identification are returned to the original destination, then the cited prior art overcomes those limitations and those limitations are inherent because the printer needs to know which host computer and which print job so that it transmits to that host computer for reporting of the processing of the specified print job.

In summary, the specification does not describe the a part of the print job data is returned back to the host computer.

Applicant asserted in pages 4 to 5 that: “ the Examiner maintains that the “command” and “data” disclosed in col. 5, lines 7-9 and lines 61-63, suggest the print job data. However,

Art Unit: 2624

such portions just state that commands and data are sent to a printer 20 and sequentially queued into an input buffer 22 in accordance with a receiving order of each (col. 5, lines 7-9). Therefore, the “command” and the “data are two discrete separate forms of data.” In reply, col. 5, lines 7-9 describes that “commands and data which are sent through the interface 31 are sequentially queued into an input buffer 22 in accordance with the receiving order” (emphasis added), not the receiving order of each. Since commands and data are sent through the interface, the commands and data would be included within the print job. The print job data would include the commands and print data, which would be well known in the prior art. The print job data could not be stored into an input buffer 22 because the capacity of the input buffer would be small and the information of the print job data would be large. Thus, the print job data should be divided into a plurality of information blocks each matching to the input buffer 22 and each of blocks should be in the order and sequentially queued into the input buffer 22.

Applicant argued in page 5 to line 5 of page 7 that “the part of the print job data”. In reply, the Examiner already discussed this limitation on the above 112-rejection section. The Examiner supports the limitation of “a part of the print job data” which would be a status information of the print job responded from the printer to the host computer based on the request information of the print job data. The Examiner rejects the claims based on the scope of the specification.

Applicant asserted in page 9 that: “ McCormick fails to teach or suggest that the same information which is generated (i.e., print job data) is also returned (i.e., part of print job data), as required by claim 20. Further, since the status information is separate and independent from the

Art Unit: 2624

status request, the disclosed status information fails to teach or disclose the reply information, which was previously issued at a predetermined position of the print job data, as required by claim 20.” In reply, first of all, the limitation of “part of the print data returned from the printer” is rejected by 112, 1st paragraph as indicated above. the Examiner considers “part of the print data returned from the printer” as a status of the print job is response by printer to the host computer. McCormick clearly teach a reply information issuance function (i.e., the queue processor) of issuing reply information (i.e., status requests) at a predetermined position of print job data containing the print data (col. 8, lines 26-33 describes that the communications driver receives the print job data including blocks of print data and status requests from the Queue Processor. Thus, the queue processor would be a reply information issuance function for issuing status requests within a predetermined position of the print job data);

a job processing state monitor function (i.e., the queue processor) of monitoring a processing state of the print job data based on a part of the print data returned from the printer in accordance with the reply information (col. 8, lines 33-36 indicates that the Queue Processor receives status information from the communication driver based on status requests issued by the queue processor “col. 8, lines 30-33” and col. 8, lines 50-53 indicates that the status information from the printer in a format that can be read and understood by a computer).

Kawakami teaches print data job containing the predetermined destination, which is included in intrinsic data of the reply information (col. 4, lines 47-50, and fig. 4 shows the 4th row indicates reply information including information of the return command and status to the predetermined destination which is showed on the 3rd row).

Art Unit: 2624

Kawakami clearly teaches the print job file including the reply information in which the reply information requests the status of the print job is returned to the host based on the information of the reply information.

For the above reasons, it is believed that the cited prior art fully discloses the claimed invention and the rejection stand.

Conclusion

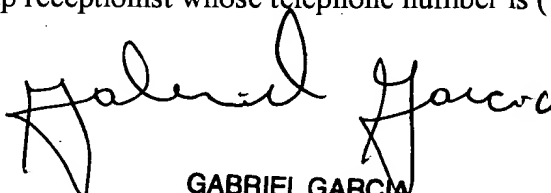
THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Douglas Q. Tran whose telephone number is (703) 305-4857 or E-mail address is douglas.tran@uspto.gov.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4700.

Douglas Q. Tran
Aug. 20, 2004


**GABRIEL GARCIA
PRIMARY EXAMINER**